



THE FUNCTION OF ARTIFICIAL INTELLIGENCE (AI) IN IMPROVING THE COMMUNICATION SKILLS OF ENGLISH LANGUAGE LEARNERS

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Abstract

In today's globalized world, the growing demand for English language proficiency has underscored the importance of effective language acquisition and communication skills. As technology continues to advance, Artificial Intelligence (AI) has emerged as a promising tool in the field of education, particularly in language learning. This study conducts a literature review to explore the role of AI in enhancing communication skills among English language learners. The research aims to examine existing studies and literature on the application of AI-based tools in English language learning contexts. The paper begins with an overview of artificial intelligence and its potential applications in education. It then investigates the various ways AI can support English language learners in improving their communication skills,

encompassing speaking, listening, reading, and writing. The findings of this review indicate that AI has the potential to significantly improve communication skills among English language learners by offering personalized and interactive learning experiences. Nevertheless, additional research is required to explore the long-term impacts and optimal implementation of AI in language learning environments. In summary, this article emphasizes the transformative potential of AI in English language education and its ability to cater to the diverse needs of learners. By understanding the current research landscape and examining the opportunities and challenges associated with AI in language learning, educators and policymakers can make informed decisions to leverage AI technology effectively and enhance its impact on developing strong communication skills among English language learners.

Keywords: Artificial Intelligence (AI); English language; Communication skills.

Introduction

English language competency has become crucial in today's linked world



for people looking to succeed in a variety of academic, professional, and personal settings (Sari, 2023). Proficiency in English facilitates access to international collaboration, education, and employment opportunities worldwide (Sari, 2021). Researchers and educators are looking into cutting-edge methods to improve language learning outcomes as the need for proficiency in the English language keeps rising. The use of artificial intelligence (AI) technologies in English language training is one such strategy that has drawn a lot of interest. The ability to mimic human intelligence is the hallmark of artificial intelligence, which has advanced significantly in recent years and is now present in many facets of life. Artificial Intelligence is being investigated more and more as a potential tool in the field of education.

The industrial period has impacted everyone's ability to adjust to rapid changes. We now face both new technological challenges and creative potential as a result of globalization and the Fourth Industrial Revolution. Technology is therefore essential for communicating details via music, images, and text (Rahayu & Pujiyono,

2017). The technology was created to facilitate human occupations and pastimes. One technology that is currently under development is artificial intelligence. Artificial intelligence (AI) is one facet of computational creativity that has increased interest in the advancement of AI technology (Cheng & Day, 2014). To increase computer creativity, a variety of artificial intelligence technologies have been implemented.

Explore the key findings, trends, and knowledge gaps in the subject.

The four fundamental language skills—speaking, listening, reading, and writing—can be developed in a number of ways by incorporating AI into language learning settings.

AI-powered Chatbots, virtual tutors, speech recognition software, and language learning applications are some of the technologies that can provide students with engaging and dynamic language learning experiences. These technologies include features like adaptive assessments, personalized information, and real-time feedback that may enhance learners' communication abilities and expedite their language acquisition process.



As a result, improvements in English teaching and learning may be effectively advanced by utilizing artificial intelligence, machine learning, intelligent search, and natural language processing (Wang, 2019). The objective of this study, related to the purpose of the aforementioned explanation is to comprehend the role of artificial intelligence (AI) and examine AI tools in ELT.

Method

This research inquiry was conducted at a library. It is research conducted by data collection, scientific writing that concentrates on the topic of the study, bibliographic data collection, or a study that is conducted to address an issue based on a critical and in-depth thorough analysis of pertinent library materials. The researcher interacts directly with the text as part of library research (Zed, 2004, p. 4). This study will review numerous reference books and journals, as well as the findings of related prior research, in order to develop a theoretical framework for the issue at hand. The information used as the foundation for this study came from books, journals, and websites related to the researcher's selected subject.

Research data is gathered from a wide range of publications and magazines that are pertinent to this study topic. The method of gathering data used in this study is documentation, which searches books, journals, and other sources for information about objects or factors. newspapers, postings, papers, and additional sources.

Literature Search: To find pertinent literature, a thorough search of journals, academic databases, conference proceedings, and pertinent internet repositories is carried out. Search terms and keywords could be "Artificial Intelligence," "AI," "language learning," or "English as a communication skills," "second language," and similar phrases. Iterative refinement of the search technique may be necessary to ensure that relevant studies are included.

Findings and Discussion Teaching the English Language Concerning Artificial Intelligence

One subset of computer-assisted language learning for learning foreign languages is AI-enabled tools. Thanks to the exponential rise of technology for large data, artificial intelligence (AI) has made a wide range of innovations in foreign language training conceivable.



Natural language processing and management (Li, 2020). The goal of teaching students English is to improve their capacity to interact with individuals from other nations (Mukhallafi, 2020).

Artificial intelligence (AI) offers several enhancements to foreign language training as a result of the quick development of big data and natural language processing technologies.

Artificial intelligence (AI)-based English instruction is a challenging and cutting-edge field (Zhu, 2017). Artificial intelligence technology may enable learning settings that are accessible to all people, including those who speak various languages or may have visual or hearing impairments (Marr, 2018).

AI will play a significant role in the supplemental support system for teachers and English language learners, claims Gawate(2019). The assertion that "AI also serves as a tool for supporting the idea of "improving English instruction" (2017). Digital skills and language ability work well together in AI to improve global competency, such as learning English. Personalized content is also a major component of digital learning technologies.

Adaptive systems based on artificial

intelligence and big data are now accessible.

Artificial intelligence is changing English learning environments. Artificial intelligence enables immersion learning in English. Learning English becomes more stereoscopic and visual through the integration and logical comprehension of data like text, speech, and images in a smart device. Students can interact with AI through the human-computer interface, which improves the realism of language environments. According to Silberman (2019), AI has a significant capacity to create a customized environment where adult learners use all of their senses to simultaneously educate their English skills in relation to their present level of English or vocational expectations or wants.

By enabling students to highlight difficult ideas, repeat them, and participate in activities that align with their interests, the Intelligence learning platform accommodates a variety of learning styles. Applications for education powered by AI are developed to enhance the teaching and learning of English. It highlights how needs-driven development went into creating the English course materials. Personalized



English language instruction and learning. The demands and preferences of the students may inform the course's development. It can be tailored to be focused on the student.

Learning English Using Artificial Intelligence Technology

Artificial intelligence (AI) technology, initially developed as one of the most advanced information systems globally, focuses on enabling machines to perform intelligent tasks traditionally reserved for humans (Han, 2019). As technology evolves, it has simplified various activities, including the process of learning and studying English. Among the technologies widely discussed today, AI stands out as a transformative tool. It has opened up numerous opportunities for language learning (Fryer & Carpenter, 2006).

According to Luo and Cheng (2020), AI technologies are revolutionizing foreign language education by addressing challenges such as limited instructional time, space, resources, and repetitive assessment processes. Thornton (2007, p. 1) notes that nearly all AI algorithms and technologies are designed to solve problems, making problem-solving a core feature of AI. This field

encompasses fluid problem-solving abilities and human-like perception of behaviour and intent, forming a broad area of study (Cobar, 2019). AI aims to create intelligent machines that mimic human thought processes and decision-making, enabling them to think and act like humans (Salvaris et al., 2018, pp. 3–4). The functioning of AI relies on three key components: access to large datasets, the ability to perform repetitive tasks, and the use of sophisticated algorithms.

AI systems learn automatically by identifying patterns and other features within the data. The field of AI is highly diverse, encompassing concepts such as machine learning, neural networks, cognitive computing, computer vision, and natural language processing. Human communication through language can range from effortless to highly complex, with many aspects still not fully understood (Nilsson, 2014). This complexity has made it challenging to develop computer systems capable of generating and translating English language fragments. One reason for this difficulty is that language evolved as a means of communication among intelligent beings. However, the rise of digital platforms has simplified the teaching and learning of English. AI



technology has significantly advanced English language proficiency, and the integration of digital and language literacy can enhance global competence. AI's foundation lies in text processing, and as AI becomes more advanced, its language capabilities grow increasingly precise. Consequently, leveraging AI technology can greatly improve foreign language teaching and learning (Yingsoon, 2021).

AI plays a crucial role in disseminating diverse information and enhancing the efficiency of English learning. The availability of various educational technologies makes it easier for students to grasp the material conveyed by instructors. Students can now learn effectively without the need for in-person interaction with teachers. Numerous AI-based language learning applications are available for English teachers, students, and learners. Below are some examples of AI technologies that can be applied to English learning.

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Conclusion

Artificial intelligence (AI) aims to develop robots with intelligence that matches or surpasses that of humans. Beyond processing natural language, AI is expected to perform tasks such as reasoning, perception, learning, and manipulating objects, all of which are designed to simplify human life. The primary goal of creating such advanced systems is to reduce working hours and enable tasks to be completed more efficiently. By leveraging AI, humans can make decisions and accomplish tasks more cost-effectively. The rise of digital platforms has also made learning English more accessible. Advances in computer and mobile technologies are expected to expand the use of AI, offering more individuals the



opportunity to enhance their capabilities. A key aspect of digital learning technology is personalized content. Today, we have access to extensive data and AI-driven adaptive systems that allow us to tailor English learning methods to each user's specific needs and time constraints.

References

- Afrianto, I., Irfan, M. F., & Atin, S. (2019). Aplikasi Chatbot Speak English Media Pembelajaran Bahasa Inggris Berbasis Android. *Komputika: Jurnal Sistem Komputer*, 8(2), 99–109. <https://doi.org/10.34010/komputika.v8i2.2273>.
- Cheng, S.-M., & Day, M.-Y. (2014). Technologies and Applications of Artificial Intelligence: 19th International Conference, TAAI 2014, Taipei, Taiwan, November 21-23, 2014, Proceedings. Springer.
- Buolamwini, J., & Gebru, T. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, 81-91
- Catherine, S., Kiruthiga, V., Suresh, N. V., & Gabriel, R. (2024). Effective Brand Building in Metaverse Platform: Consumer-Based Brand Equity in a Virtual World (CBBE). In *Omnichannel Approach to Co-Creating Customer Experiences Through Metaverse Platforms* (pp. 39-48). IGI Global
- Catherine, S., Rani, M. N., & Suresh, N. V. (2024). The Metaverse Economy: Transforming Money With Digital Currency. In *Creator's Economy in Metaverse Platforms: Empowering Stakeholders Through Omnichannel Approach* (pp. 202-209). IGI Global
- Helen, D., & Suresh, N. V. (2024). Generative AI in Healthcare: Opportunities, Challenges, and Future Perspectives. *Revolutionizing the Healthcare Sector with AI*, 79-90.
- Suresh, N., & Bhavadharani, S. (2021). An Empirical Study on the Impact of Passenger Loyalty Program on Passenger Retention with Reference to Air India. *Productivity*, 62(1).
- Poongavanam, S., Srinivasan, R., Arivazhagan, D., & Suresh, N. V. (2023). Medical Inflation-Issues and Impact. *Chettinad Health City Medical Journal* (E-2278-2044 & P-2277-8845), 12(2), 122-124.
- Suganya, V., & Suresh, N. V. (2024). Potential Mental and Physical Health Impacts of Spending Extended Periods



- in the Metaverse: An Analysis. In Creator's Economy in Metaverse Platforms: Empowering Stakeholders Through Omnichannel Approach (pp. 225-232). IGI Global.
- Suresh, N. V., Selvakumar, A., Sasikala, B., & Sridhar, G. (2024, June). Integrating Environmental, Social, and Governance (ESG) Factors into Social Accounting Frameworks: Implications for Sustainable Business Practices. In International Conference on Digital Transformation in Business: Navigating the New Frontiers Beyond Boundaries (DTBNNF 2024) (pp. 18-28). Atlantis Press.
- Suresh, N. V., Selvakumar, A., Sridhar, G., & Trivedi, S. (2024). A Research Study on the Ethical Considerations in Harnessing Basic Science for Business Innovation. In Unleashing the Power of Basic Science in Business (pp. 55-64). IGI Global.
- Suresh, N. V., Selvakumar, A., Sridhar, G., & Catherine, S. (2024). Operational Efficiency and Cost Reduction: The Role of AI in Healthcare Administration. In Revolutionizing the Healthcare Sector with AI (pp. 262-272). IGI Global.
- Suresh, N. V., Selvakumar, A., Sridhar, G., & Catherine, S. (2024). Ethical Considerations in AI Implementation for Patient Data Security and Privacy. In AI Healthcare Applications and Security, Ethical, and Legal Considerations (pp. 139-147). IGI Global.
- Suresh, N. V., Selvakumar, A., Sridhar, G., & Jain, V. (2024). Integrating Mechatronics in Autonomous Agricultural Machinery: A Case Study. *Computational Intelligent Techniques in Mechatronics*, 491-507.
- Suresh, N. V., & Remy, V. A. M. (2024, February). An Empirical Study on Empowering Women through Self Help Groups. In 3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023) (pp. 957-964). Atlantis Press.
- Covili, J. J. (2016). *Going Google: Powerful Tools for 21st Century Learning*. Corwin Press.
- Gawate, S. (2019). *Artificial Intelligence (AI) Based Instructional Programs in Teaching Learning of English Language*. <https://doi.org/10.33329/ijelr.64.69>